

Figure 1

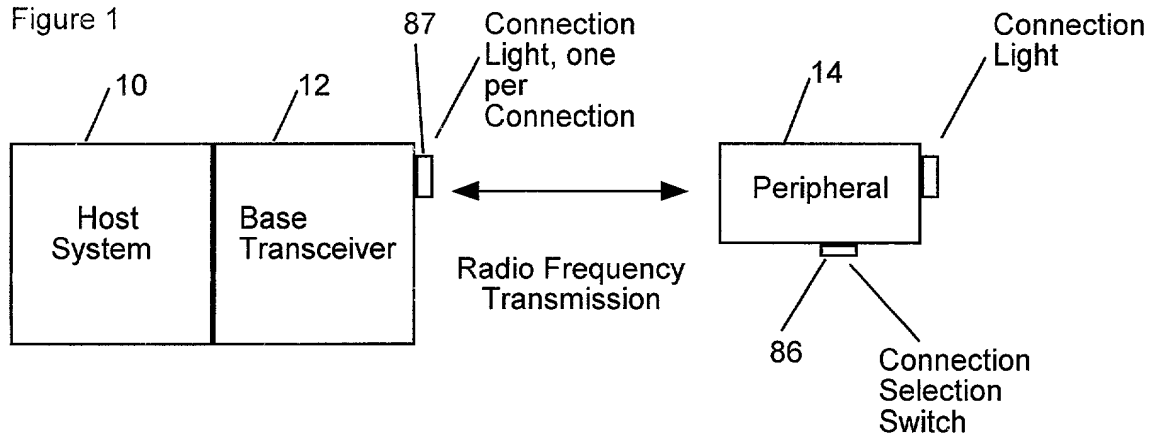


Figure 2

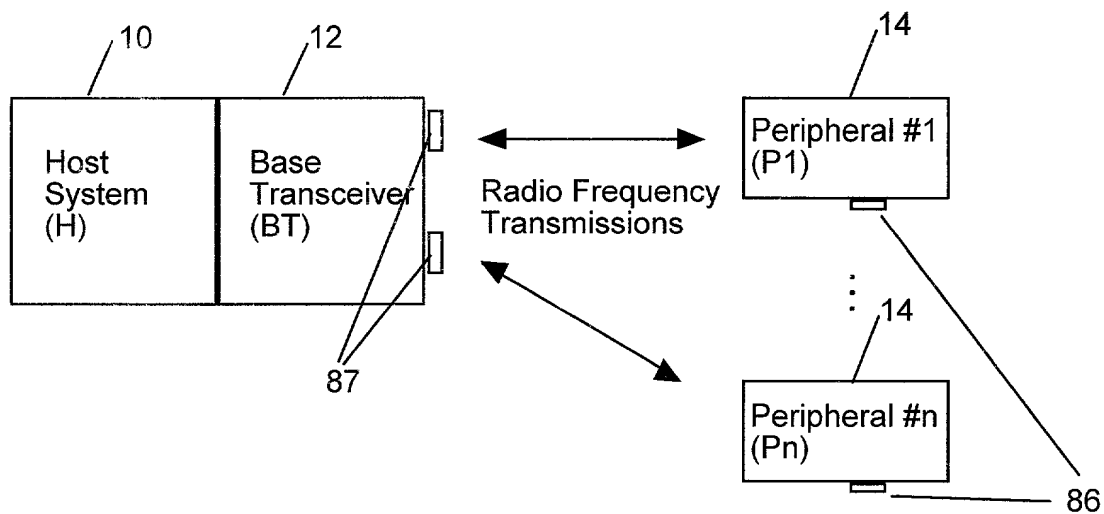


Figure 3

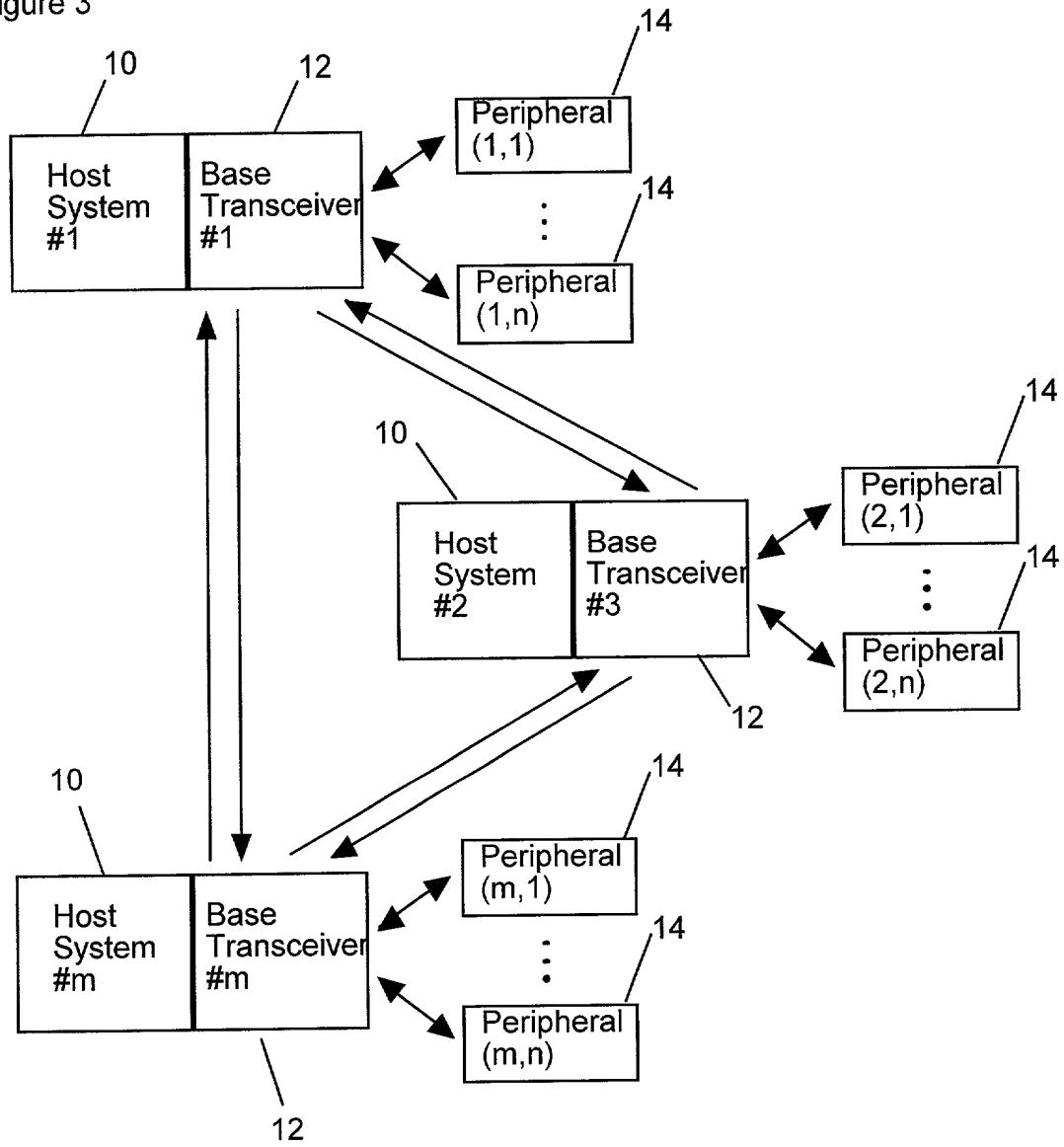


Figure 4a

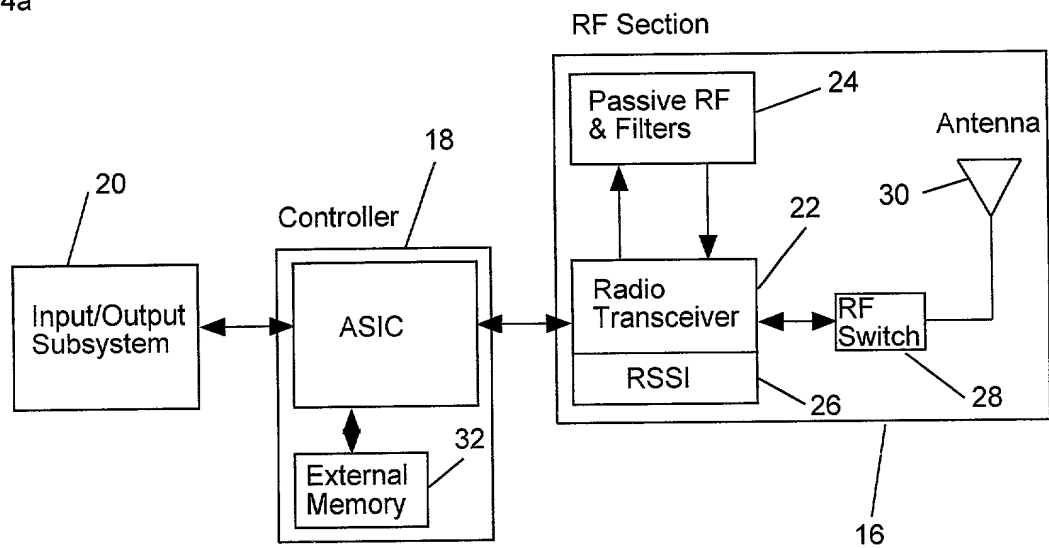


FIG. 4b Peripheral

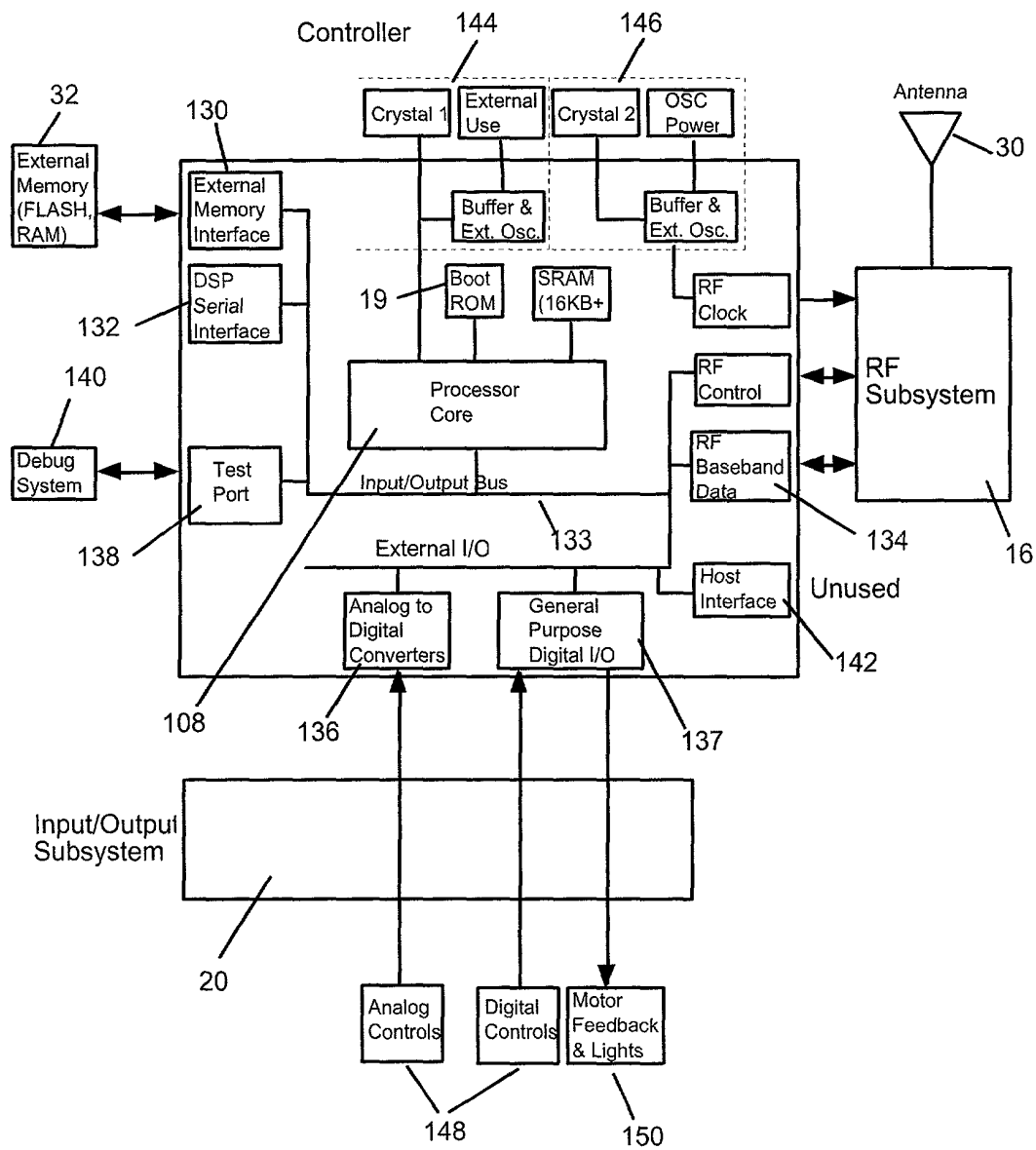


FIG. 4c Base Transceiver Subsystem

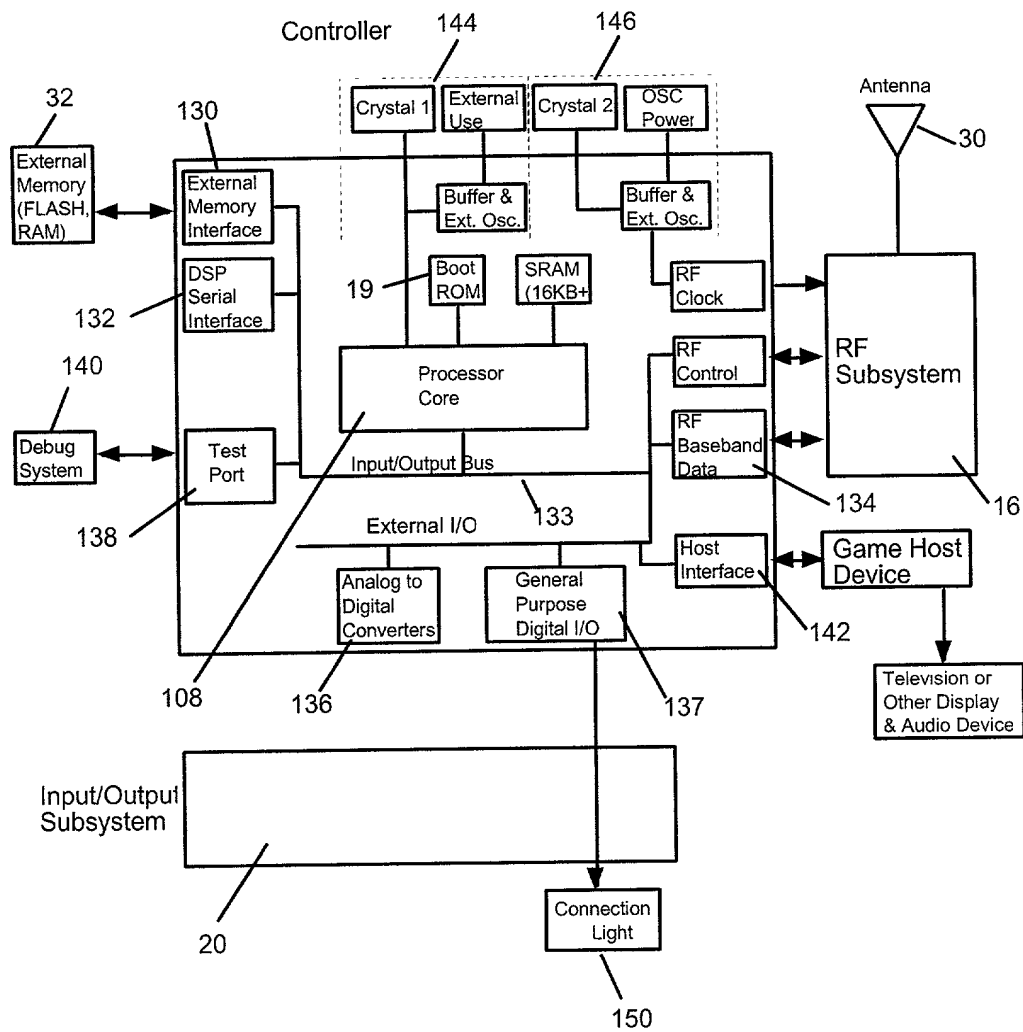


Figure 5

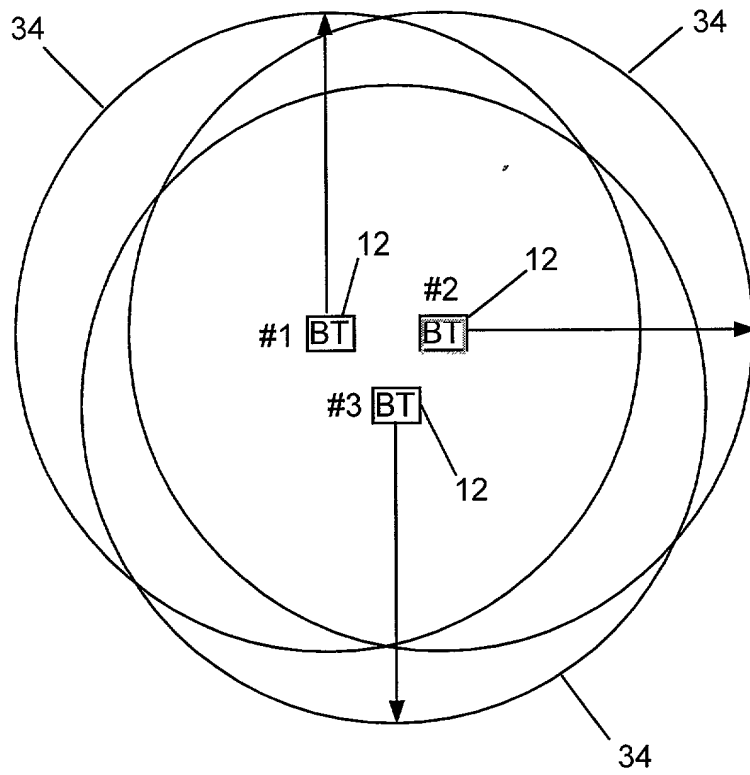


Figure 6

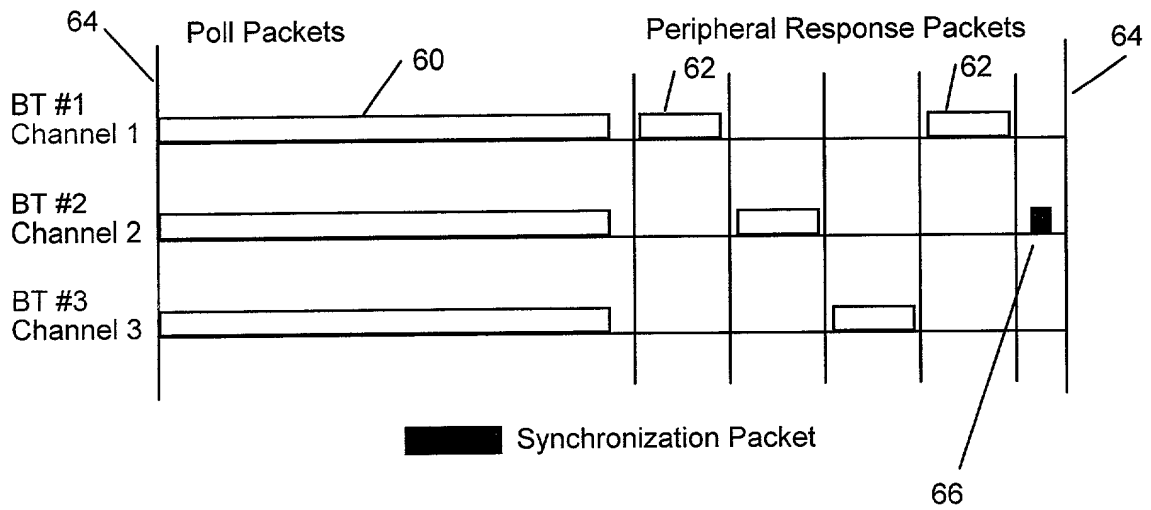


Figure 7

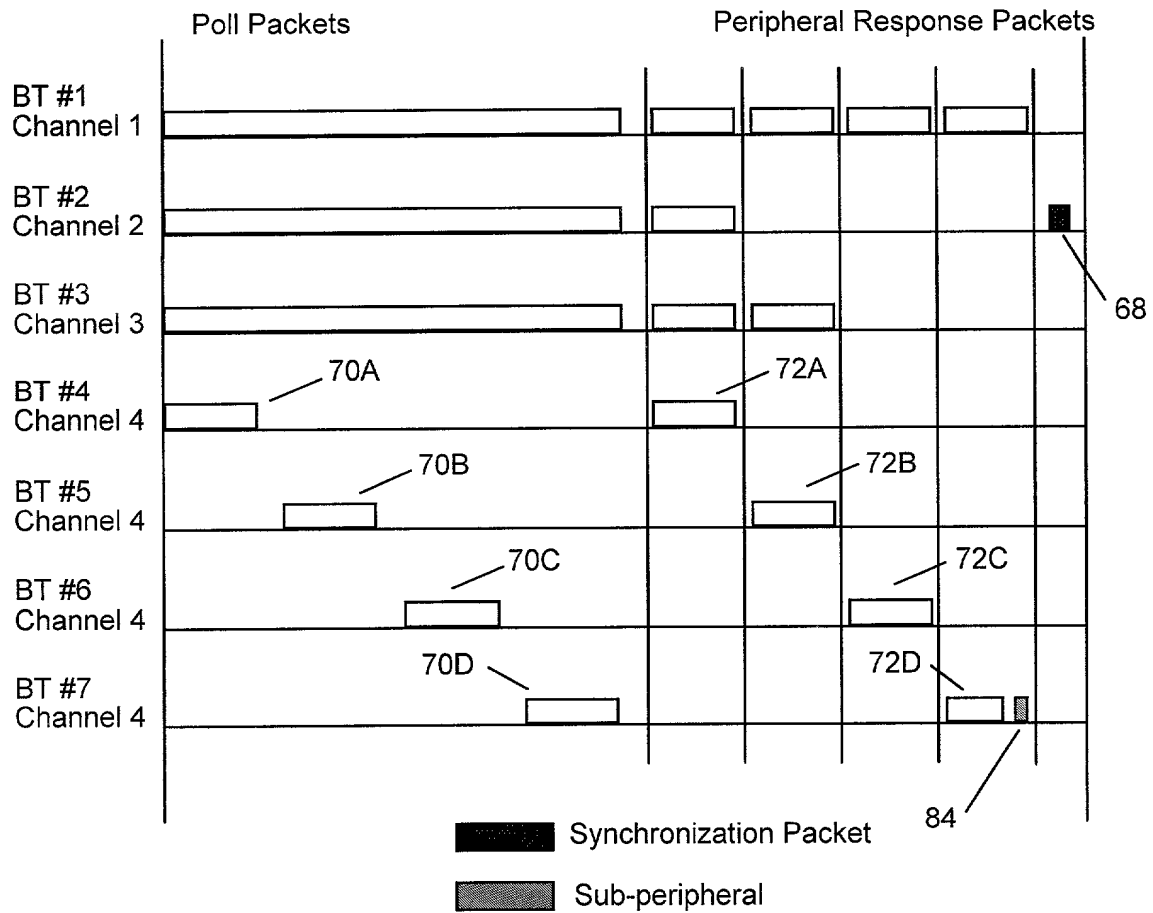


Figure 8a

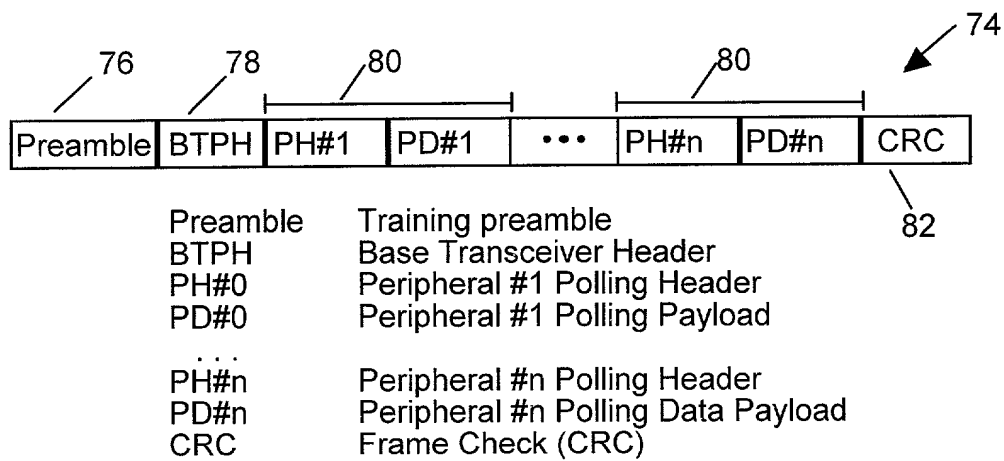


Figure 8b

POLL Packet
 PREAMBLE
 POLL HEADER (3 byte)
 START Code
 POLL Packet Identifier
 POLL Packet Length
 Message Type - e.g. JOIN type
 Message Data
 SYNC Sequence Type
 SYNC Sequence Pointer
 BT Sync Period
 BT ID Number
 BT Subslot Number
 Channel Hop Sequence Type
 Channel Hop Sequence Pointer
 Channel Hop Rate - every 1 to n volleys
 RESERVED
 Peripheral Field Identifier
 Peripheral Field Length
 P1 Header - P1, mating ID, data field length
 P1 Data
 ...
 Pn Header
 Pn Data
 CRC

Figure 9a

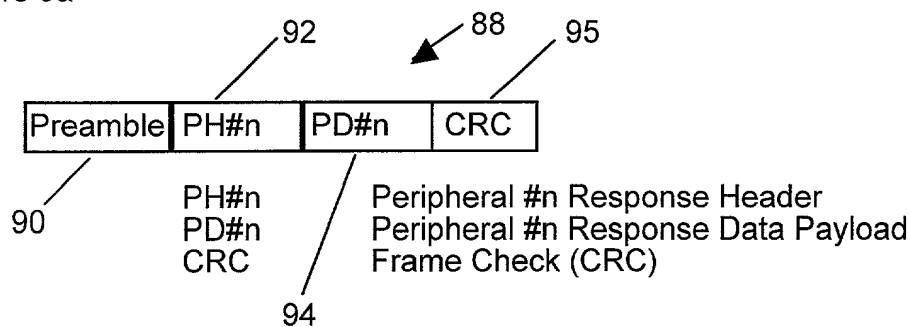


Figure 9b

RESPONSE Packet
 PREAMBLE
 RESPONSE HEADER (3byte)
 START Code
 RESPONSE Packet Identifier
 RESPONSE Packet Length
 Short Form Mating ID
 RESERVED
 RESPONSE DATA PAYLOAD
 Message Type
 Message Length
 Message Data
 CRC

Figure 10

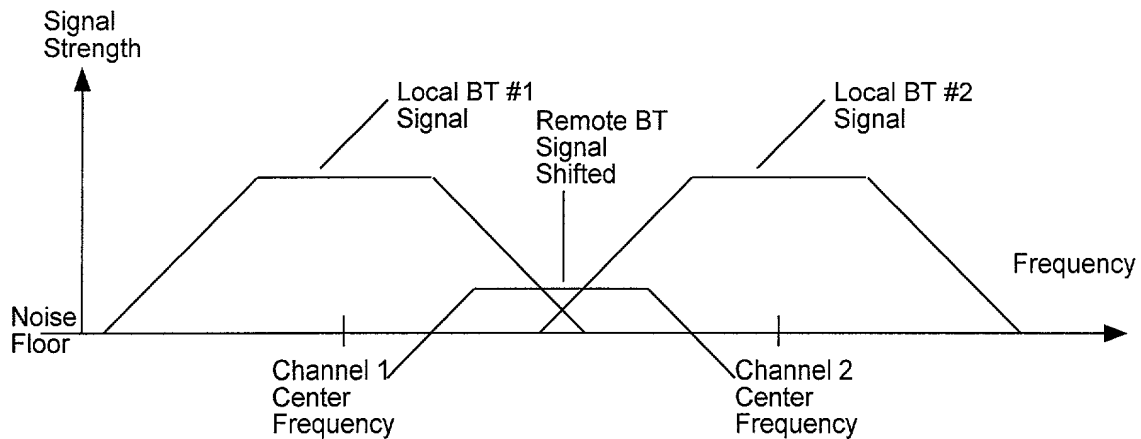
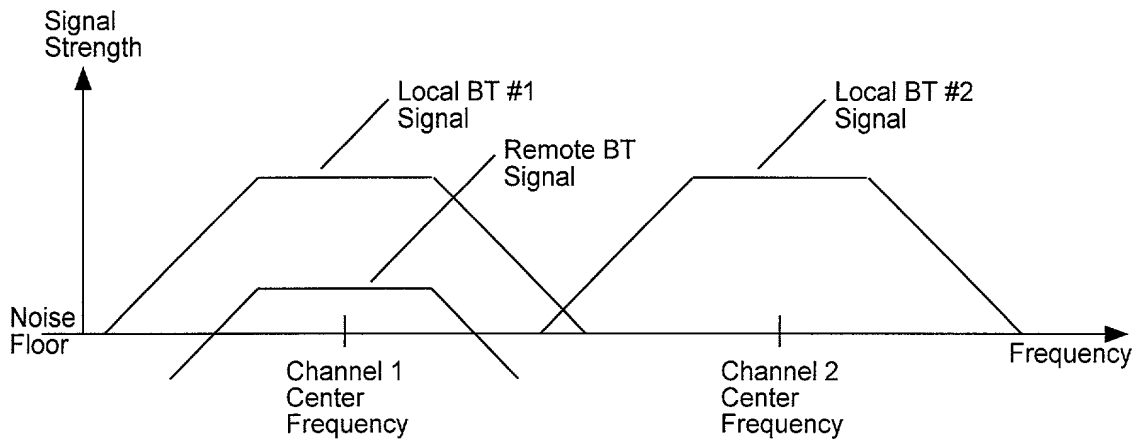


Figure 11a Synchronization Packet Format

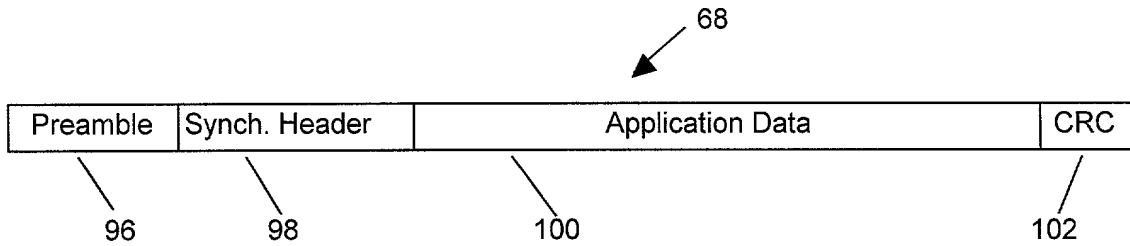


Figure 11b

SYNC Packet

- PREAMBLE
- SYNC HEADER (3byte)
 - START Code
 - SYNC Packet Identifier
 - SYNC Length in bytes
 - Code Type Used
 - RESERVED
- APPLICATION DATA
 - SYNC Sequence Type
 - SYNC Sequence Pointer
 - BT Sync Period
 - BT ID Number
 - BT Subslot Number
 - Number of Channels
 - Channel List
 - Channel Hop Sequence Type
 - Channel Hop Sequence Pointer
 - Channel Hop Rate - every 1 to n volleys
 - Number of BT Map items
 - BT Map
 - BT ID #1, Channel Hop pointer, SYNC Hop pointer
 - BT ID #2, Channel Hop pointer, SYNC Hop pointer
 - NULL, Channel Hop pointer, SYNC Hop pointer
 - BT ID #3, Channel Hop pointer, SYNC Hop pointer
 - Number of Peripherals
 - Number of Slots
 - P Map
 - P ID #1, Slot Number e.g.S=1
 - P ID #2, Slot Number e.g.S=2
 - P ID #3, Slot Number e.g.S=3
 - P ID #4, Slot Number e.g.S=3 - subperipheral
 - Message Type - e.g. New BT, Channel abandon, Channel add
 - Message Data
- CRC

Figure 12a Adding and Removing Base Transceivers

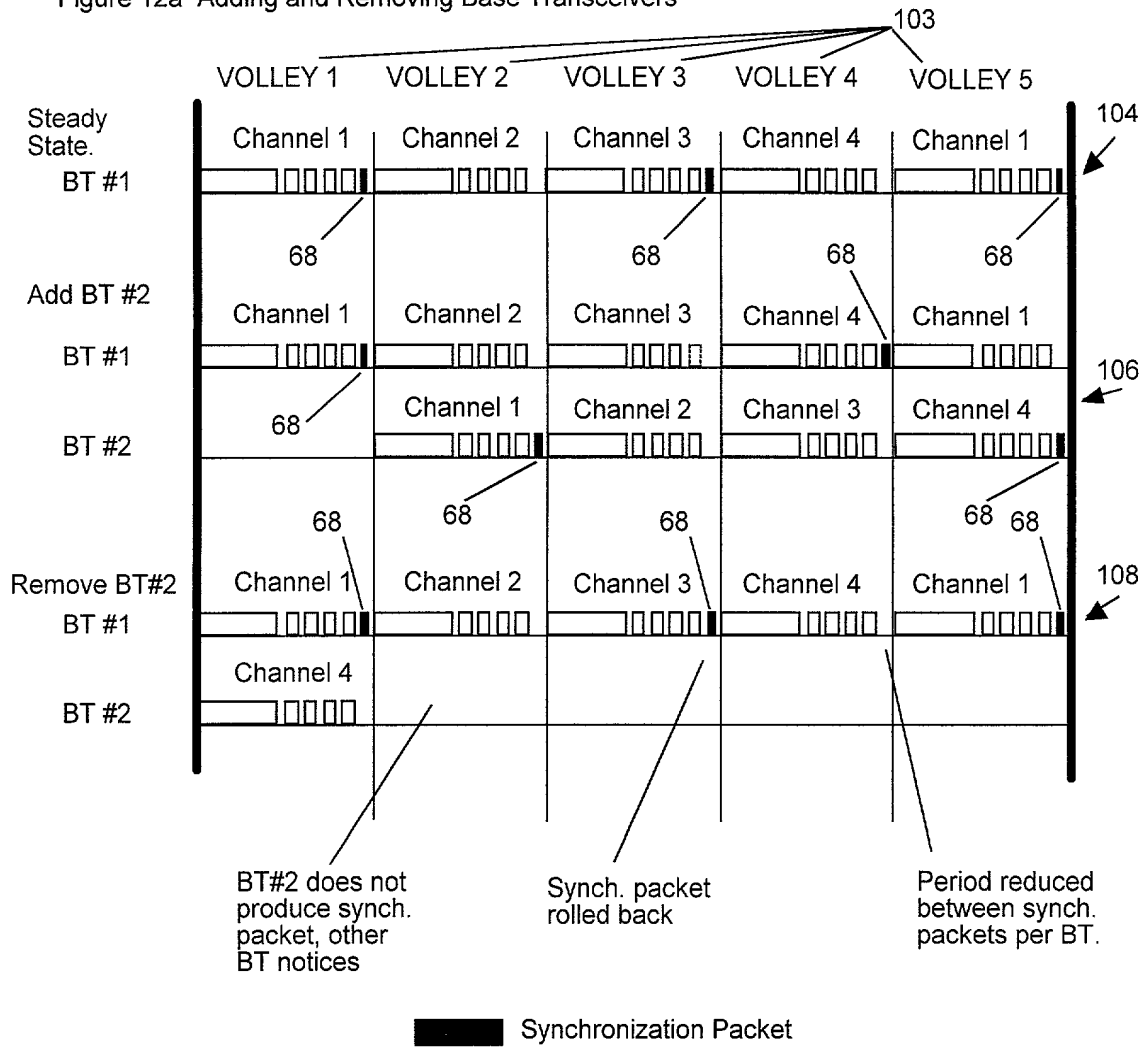


Figure 12b Adding a Base Transceiver - State Information

OPERATING PARAMETERS		STATE INFORMATION PER POLLING VOLLEY				
250	Polling Volley Number	1	2	3	4	5
252	SYNC Channel	1	1	1	4	4
254	BT Map BT #1	BT #1,1,1 NULL,4,4	BT #1,2,2 NULL,1,1	BT #1,3,3 BT #2,2,2 NULL,1,1	BT #1,4,4 BT #2,3,3 NULL,2,2	BT #1,1,1 BT #2,4,4 NULL,3,3
256	BT Map BT #2	No map, just listening	BT #1,2,2 BT #2,1,1 NULL,4,4	BT #1,3,3 BT #2,2,2 NULL,1,1	BT #1,4,4 BT #2,3,3 NULL,2,2	BT #1,1,1 BT #2,4,4 NULL,3,3
258	BT #1 SYNC Period	2	2	3	3	3
260	BT#2 SYNC Period	None, listening	3	3	3	3
262	Listening BTs	BT #2	BT #1	BT #1, BT #2	BT #2	BT #1
264	SYNC Packet Broadcasting BTs	BT #1	BT #2	Listen to NULL freq	BT #1	BT #2
266	SYNC Message BT #1	None	None	None	None	None
268	SYNC Message BT #2	None	New BT	None	None	None

Figure 13

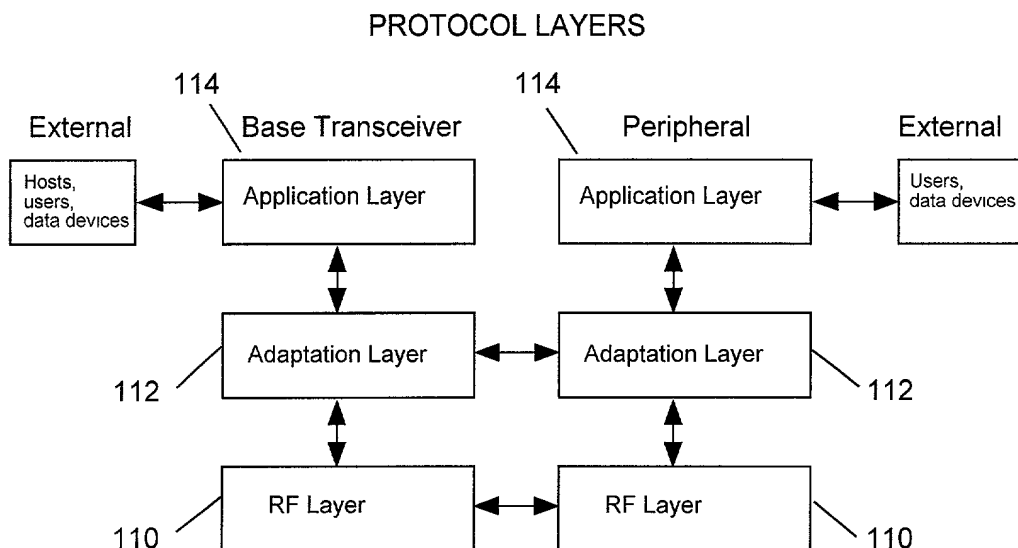


Figure 14

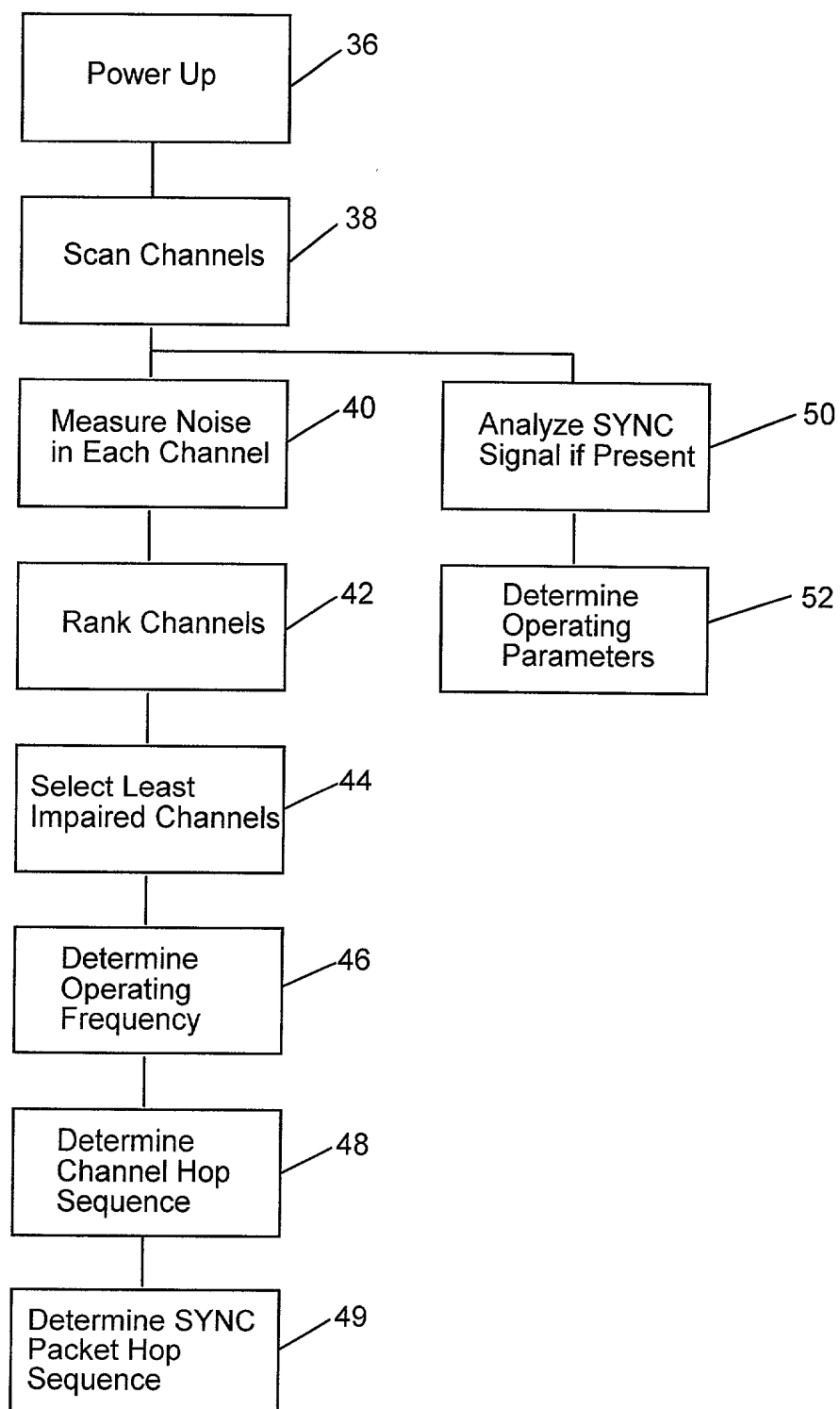


Figure 15

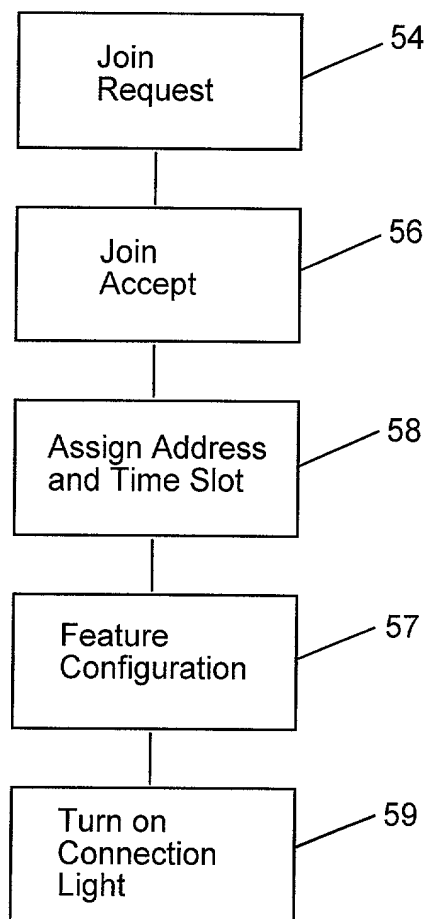


Figure 16 Resize Operation

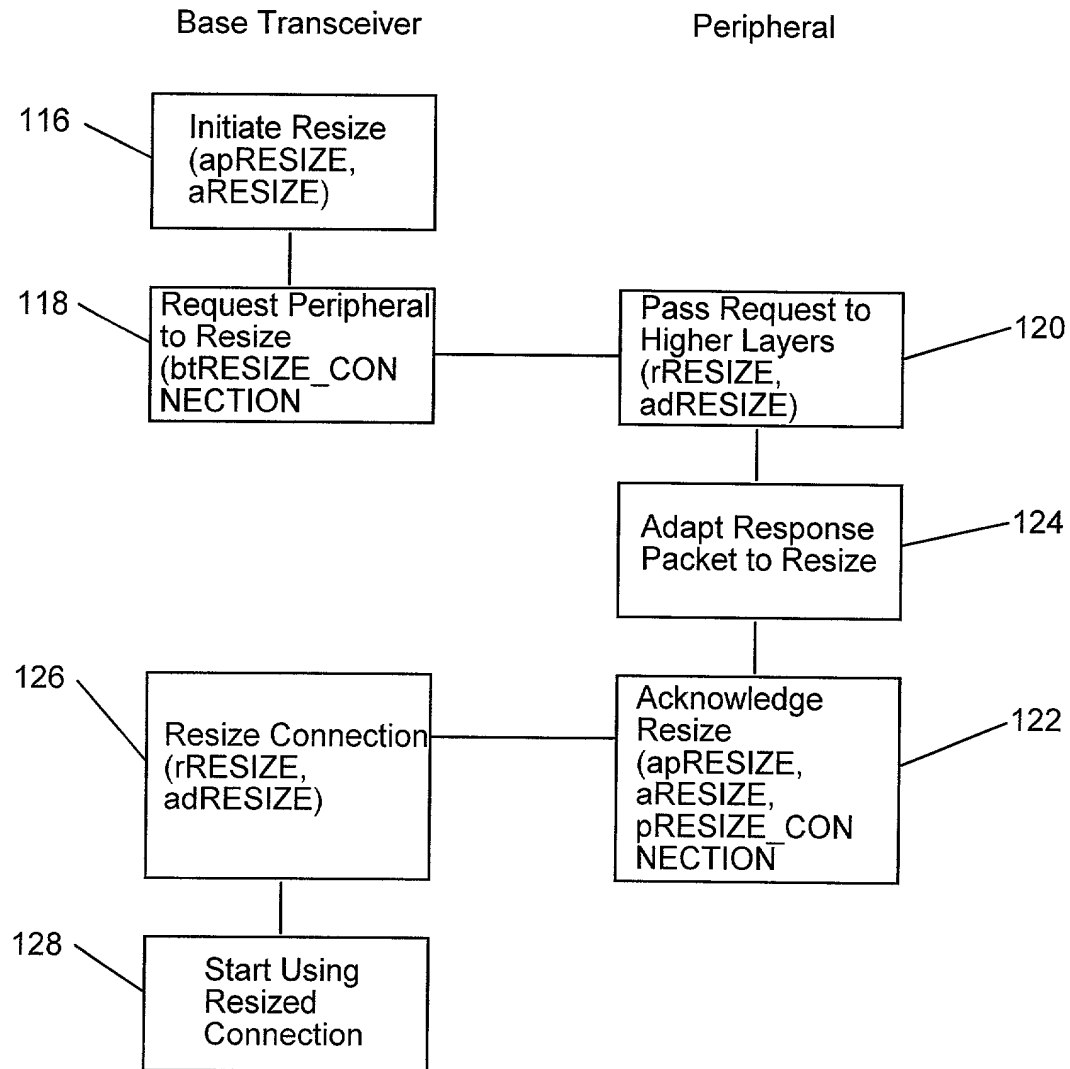


Figure 17 Bit & Word Synchronization

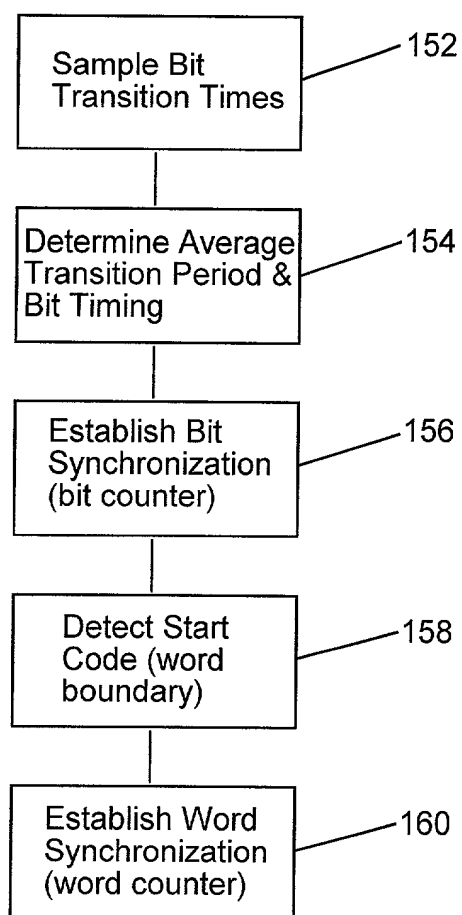


Figure 18 BT Polling Synchronization

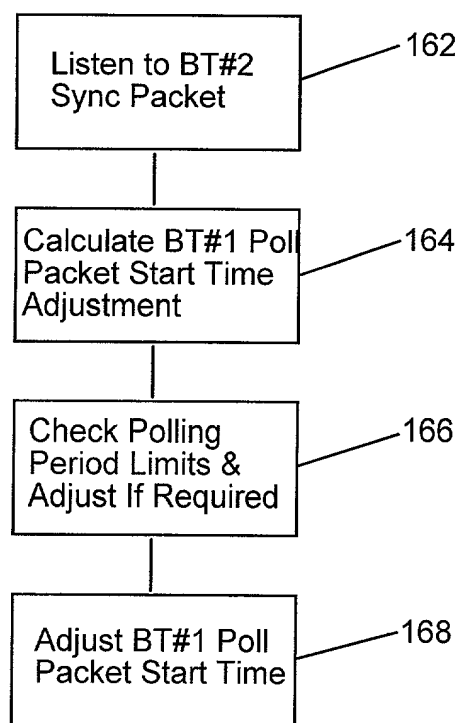


Figure 19 Base Transceivers Sharing a Channel

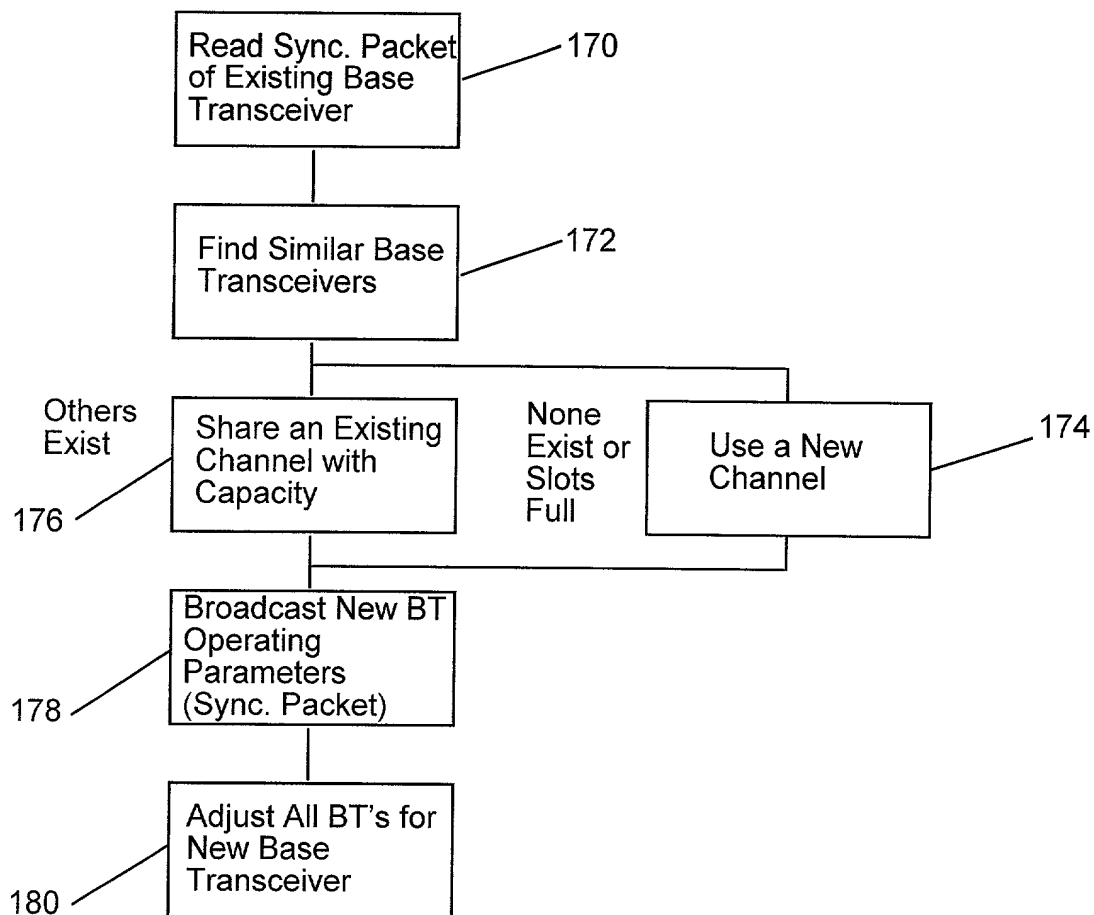


Figure 20 Manual Time Slot Change

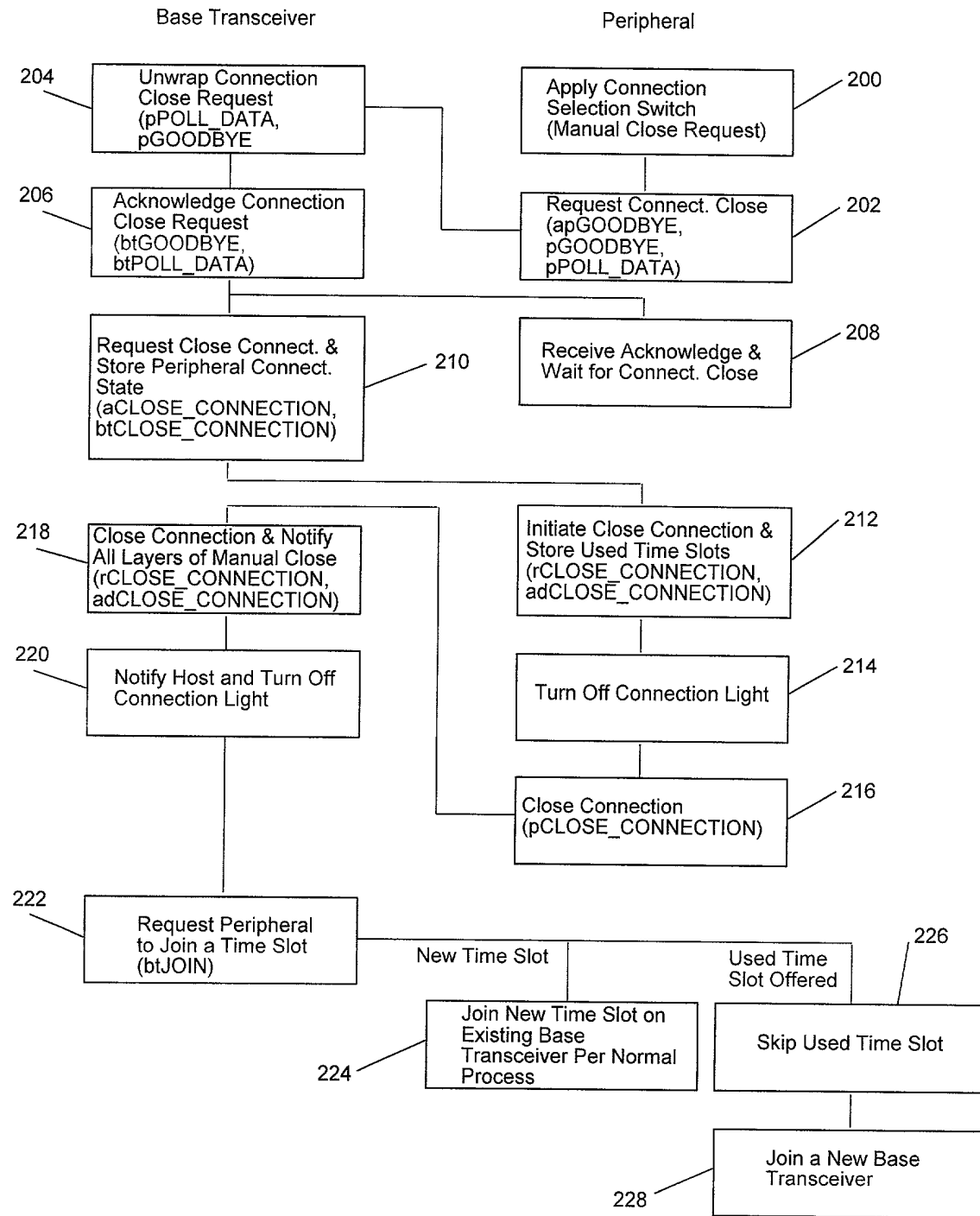


Figure 21 Bit Error Adaptation

